

Remarks

In the Office Action mailed August 2, 1999, the Examiner expressed concern over previously submitted evidence concerning the commercial success of Spalding's Strata™ golf balls.

In that Action, claim 5 was rejected under 35 U.S.C. § 112, second paragraph.

Claims 1-13 were provisionally rejected under 35 U.S.C. § 101.

Claims 1-13 were also rejected for obviousness-type double patenting.

Claims 1-5 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 4,431,193 to Nesbitt in view of U.S. Patent No. 5,222,739 to Horiuchi.

Claims 1-8 and 12 were rejected under §103(a) over the '193 patent to Nesbitt in view of the '739 patent to Horiuchi and U.S. Patent No. 4,884,814 to Sullivan.

Claims 1-5, 9-11, and 13 were rejected under § 103(a) over U.S. Patent No. 4,919,434 to Saito in view of the '739 patent to Horiuchi.

In this Response, Applicant presents clarifying amendments and remarks that are believed to remedy all of the Examiner's concerns and place all currently pending claims, i.e. claims 1-8, 12, and 13 in condition for allowance. Applicant also presents new dependent claims 14-16 believed to also be in condition for allowance.

A. Previously Submitted Evidence of Commercial Success

The commercial embodiment of the present invention golf ball is the Top-Flite® Strata™ golf ball. Spalding Sports Worldwide, Inc., has experienced incredible success in terms of sales, praise within the industry, and widespread adoption throughout the golf industry and related fields of its Strata™ balls.

In the August 2, 1999 Office Action, the Examiner expressed concern over evidence previously submitted by Applicant demonstrating the outstanding success of the Strata™ ball. Specifically, the Examiner stated:

The newspaper articles, advertisements etc. submitted do not completely identify what the Strata ball is made of. Applicant's claims encompass many materials. The claims could not possibly be commensurate

in scope with the showing. The outer cover is said to be Balata in the submitted articles/advertisements. The current claims do not call for Balata in the outer cover.

Page 2 of Office Action mailed August 2, 1999.

The Examiner's concern is misplaced. Although many of the referenced articles refer to the cover of the Strata™ balls as "balata," that cover is actually designated as "ZS Balata." The Strata™ balls utilize an ionomeric resin and not conventional balata to form the outer cover layer. Spalding refers to these ionomeric materials as "ZS Balata" because they exhibit balata-like properties such as a soft feel and enhanced spin, without the disadvantages of conventional balata such as splitting and cutting tendencies.

A closer review of the previously submitted evidence reveals the composition of the cover material of the Strata™ balls:

The multi-layer ZS Balata covered ball is designed to deliver superior distance, unequalled spin control and the feel of a soft cover.

ZS BALATA

Super-soft ZS balata cover for highest spin.

Exhibit 1 submitted with the Preliminary Amendment filed July 23, 1998 (article dated May 2, 1996 in *USA Today*).

Top-Flite Strata Tour has a new ZS Balata™ outer cover that is also patented. Its advanced polymer construction makes it not only soft and resilient, but cut resistant.

Exhibit 33 submitted on July 23, 1998 (Top-Flite's website).

Furthermore, the outer covers of the present invention golf balls are described in the application as "offering the 'feel' and spin characteristics associated with soft balata and balata-like covers of the prior art." Page 1.

In summary, the present invention provides a multi-layered golf ball comprising covers that have a hard inner layer and a relatively soft outer layer. The

improved multi-layer golf balls provide enhanced distance and durability properties, while at the same time offering the "feel" and spin characteristics associated with soft balata and balata-like covers known in the art.

The pending claims recite, in part, a golf ball comprising (i) a core, (ii) an inner cover layer molded on the core, and (iii) an outer cover layer molded on the inner cover layer. The pending claims also recite specific materials or characteristics for each of the layers. The pending claims further recite that the outer cover layer is relatively soft. And, all claims, as now amended, recite that the outer cover layer comprises an ionomeric material. It will be appreciated that although this feature may be recited differently in various claims, it is present in all pending claims.

Applicant respectfully submits that the pending claims, particularly as now amended, are commensurate with the showing provided by the previously submitted evidence.

B. Rejection of Claim 5 Has Been Remedied

Claim 5 was previously rejected under 35 U.S.C. § 112, second paragraph. In particular, the Examiner stated that the claimed sizes do not appear to be intended.

Applicant appreciates the careful and thoughtful review by the Examiner. The cover layer thicknesses previously recited in claim 5 were typographical errors. Claim 5 has been amended to correctly recite these layer thicknesses. No new matter is added by these amendments since support is found throughout the application as originally filed. See for instance, page 36, lines 5-12.

C. Provisional Rejection of Claims 1-13 Under § 101 Should be Withdrawn

Claims 1-13 were provisionally rejected under 35 U.S.C. § 101 as claiming the same invention as claims 1-13 of copending application Serial No. 08/815,556. The '556 application is currently under appeal.

In view of the amendments to all independent claims 1, 12, and 13, the claims of this application are not claiming the same invention as that of the '556 application. Accordingly, this ground of rejection should be withdrawn.

D. Obviousness-Type Double Patenting Rejection of Claims 1-13 Should Be Withdrawn

Claims 1-13 were rejected for obviousness-type double patenting based on U.S. Patent No. 5,803,831.

Although Applicant disagrees with the Examiner's view, in order to expedite allowance of all pending claims, Applicant submits herewith a Terminal Disclaimer. This Terminal Disclaimer disclaims the patent term of this case extending beyond the term of the '831 patent.

E. Rejection of Claims 1-5 Under § 103 Should Be Withdrawn

Claims 1-5 were rejected under § 103 as obvious over U.S. Patent No. 4,431,193 to Nesbitt in view of U.S. Patent No. 5,222,739 to Horiuchi et al. In support of the rejection the Examiner stated:

Nesbitt discloses golf balls having a hard inner cover and a softer outer cover. The inner cover can be Surlyn 1605 and the outer cover can be Surlyn 1855 (col. 3 lines 28-30). The amount of acid in the inner cover ionomer is not limited. Surlyn 1605 has 15% acid (see Parnell col. 4, lines 65) which borders on applicant's acid range.

It is known that higher acid ionomers are superior in golf balls (see Horiuchi col. 1 line 56). It would have been obvious to use a slightly higher acid ionomer in the inner cover of Nesbitt's ball for the expected improvements.

Pages 3-4 of August 2, 1999 Office Action.

At first blush, the Examiner's combination of references may seem to be relevant to the patentability of the pending claims. However, a closer review reveals that the combination of the '193 patent to Nesbitt and the '739 patent to Horiuchi et al. actually teach away from the subject matter recited in claims 1-5.

As will be recalled, claim 1, as now amended, recites a golf ball comprising a core, an inner cover layer comprising a high acid ionomer that includes at least 16% by weight acid and an outer cover layer that comprises a soft polymeric low flexural modulus ionomer resin.

Starting with the '193 patent to Nesbitt, one might be motivated to

design a golf ball with a core and a multi-layer cover. However, in following the teachings of the '193 patent, one would be motivated to use a relatively low acid ionomer such as Surlyn 1605 in the inner cover layer. As correctly pointed out by the Examiner, Surlyn 1605 is an ionomer comprising 15% acid.

Apparently, the Examiner relies on the '739 patent to Horiuchi et al. to make the leap to the subject matter recited in the claims at issue. This would require, among other things, some urging in the prior art that it is desirable or advantageous to increase the acid content of an ionomer utilized in the inner cover layer of a multi-layer golf ball to at least 16%. Horiuchi et al. does not provide this requisite teaching.

Although Horiuchi et al. note the use of ionomers having 16 to 30% acid, they teach the use of these high acid ionomers in a single outer cover layer of a golf ball. Horiuchi et al. entirely fail to teach the use of such ionomers in a multi-layer cover assembly. Horiuchi et al. also completely fail to teach the use of such ionomers in an inner cover layer of a golf ball. And, if one did look to the description provided by the '739 patent to Horiuchi et al. in designing a multi-layer golf ball, one would be motivated to utilize such high acid ionomers in the outer cover layer:

It has been surprisingly found that a carboxyl-rich ionomer resin which contains 16 to 30% by weight of an alpha, beta-ethylenic unsaturated carboxylic acid significantly improves the properties of the golf balls, such as impact resilience and flying performance.

Col. 1, lines 31-36 of the '739 patent.

It is preferred that the carboxyl-rich ionomer resin of the present invention has a stiffness modulus of 3,000 to 6,000 Kgf/cm². Values of less than 3,000 Kg/cm² reduce impact resilience and those of more than 6,000 Kgf/cm² deteriorate hit feeling and durability when hit repeatedly.

Col. 2, lines 16-21 of the '739 patent.

It is clear that the "cover" referred to throughout the '739 patent is a single layer cover, and without a doubt, an outer cover.

In the event that a designer of a multi-layer golf ball somehow was motivated to look to the teachings of the '739 to Horiuchi et al. patent, he or she would consider adopting a single cover layer configuration. If for some reason one looked to the '739 patent in designing a multi-layer cover golf ball, one would be motivated to use a high acid ionomer in the outer cover layer of the multi-layer golf ball. There is absolutely no teaching to use a high acid ionomer in an inner cover layer of a golf ball as recited in the pending claims.

In point of fact, the '739 patent actually teaches away from the recitations of claims 1-5. The '739 patent teaches utilizing a high acid ionomer in the outer cover layer rather than an inner cover layer as recited in the claims at issue.

For at least these reasons the rejection of claims 1-5 is respectfully submitted to be misplaced.

F. Rejection of Claims 1-8 and 12 Under § 103 Has Been Remedied

In this ground of rejection, the Examiner asserted that claims 1-8 and 12 were obvious based upon the previously discussed patents to Nesbitt and Horiuchi, in view of U.S. Patent No. 4,884,814 to Sullivan et al.

The '814 patent to Sullivan is not particularly relevant to the patentability of the pending claims. The '814 patent is directed to golf balls having a single cover layer comprising particular blends of ionomers. All pending claims recite a multi-layer golf ball having an inner cover layer of a particular composition and an outer cover layer having another particular composition.

The '814 patent to Sullivan does not remedy the deficiencies of the previously discussed combination of the '193 patent to Nesbitt in view of the '739 patent to Horiuchi et al. For at least these reasons, Applicant respectfully submits that the present rejection be withdrawn.

G. Rejection of Claims 1-5, 9-11 and 13 Under § 103 Has Been Remedied

In this ground of rejection, the Examiner relied upon U.S. Patent No. 4,919,434 to Saito in view of the '739 patent to Horiuchi et al. to reject under § 103, claims 1-5, 9-11, and 13.

This ground of rejection is analogous to that previously discussed

concerning claims 1-5 and discussed in Section E herein. Essentially, the '434 patent to Saito is relied upon for its teaching of a multi-layer cover assembly for a golf ball. And, the '739 patent to Horiuchi et al. is looked to for its disclosure of using ionomers having 16 to 30% acid. However, Horiuchi et al. entirely fail to teach the use of such ionomers in a multi-layer cover assembly. And, as previously explained, if for some reason one looked to the '739 patent in designing a multi-layer golf ball, one would be motivated to use a high acid ionomer in the outer cover layer. This is entirely opposite from the subject matter of claims 1-5, 9-11, and 13.

Claims 1-5 all recite that the outer cover layer comprise a soft polymeric low flexural modulus ionomer resin, i.e. a low acid ionomer, and the inner cover comprise an ionomer including at least 16% acid.

In fact, the '434 patent to Saito teaches away from the specific arrangement of cover layers recited in the pending claims. As noted, the claims at issue call for a soft outer cover layer and a hard inner cover layer. In contrast, Saito teaches:

The inner layer that directly encloses the solid core is made of a comparatively soft thermoplastic resin. (Emphasis Added)

Col. 4, lines 66-67 of the '434 patent.

The outer cover layer enclosing the above-mentioned inner layer is formed from a hard thermoplastic resin. (Emphasis Added)

Col. 5, lines 53-54 of the '434 patent.

Accordingly, the '434 patent expressly teaches directly opposite from the claimed subject matter set forth in claims 1-5 and 13. Claims 9-11 have been cancelled and so the rejection of these claims is moot.

H. New Claims 14-16

Applicant herein presents new claims 14-16, dependent from pending independent claims 1, 12, and 13, respectively. Each of claims 14-16 expressly recites that the outer cover layer of the present invention golf balls comprises a low acid ionomer, and that such ionomer contains less than 16 weight percent acid. No

new matter is added by these claims since support is found throughout the application, such as at page 24, lines 9-10.

I. Conclusion

In view of the foregoing, Applicant respectfully submits that all of pending claims 1-8 and 12-13 are in condition for allowance. And, all of new claims 14-16 are in condition for allowance.

Respectfully submitted,
FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP



Richard M. Klein
Reg. No. 33,000
Mark E. Bandy
Reg. No. 35,788
1100 Superior Avenue, 7th Floor
Cleveland, OH 44114-2518
(216) 861-5582